



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D5634-041
Job Sheet 201349



Part No: D5634-041

Job Qty: 1 pcs

Part Name: Float Skidtube Assembly



Part Weight: 0 lbs

Job Created: 10/1/19

Due Date: 10/11/19

Type: Stock

Status: New

Job Tracking No:

Created By: Marie Lajeunesse

Description:

For DT10584

Large Fab Tooling

Priority: Medium

SEE ATTACH

Request Sheet

Note: DWG D5634 REV.A IPP REV:A 19.01.17 NEW ISSUE DD VERF:JFS IPP Rev:B A13 19.01.31 drawing
revision DP Verify DD IPP Rev:C 19.03.11 as per dwg A14 DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard Setup Hrs	Run Hrs	Workcenter/Supplier	Lead Time	Sign-off
100	Skidtubes - 1	1 pcs		10/11/19	0.00	2.17	Skidtubes - 1		
							Skidtubes - 2		
							Skidtubes - 3		
							Skidtubes - 4		
							Skidtubes - 5		
							Skidtubes - 6		
							Skidtubes - 7		
110	QC 5	1 pcs		10/11/19	0.00	0.00	QC 5 - 10		
							QC 5 - 12		



Container No: S219130



Part: D5634-041

Job No: 201349

Serial No/Batch: S219130

Revision: A

Inspector:

Exp Date:

Instructions: Various STC's

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 10/02/19

115 QC 10

1 pcs

10/11/19

0.00 0.00

QC 5 - 40

QC 5 - 61

QC 5 - 81

QC 10 - 10

QC 10 - 18

QC 10 - 24

QC 10 - 43

DAS
10
9-89

N/A

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120 Handfinish - 1-1 Chemical-
B4B1
pcs

10/11/19

0.00 0.25

QC 10 - 50

QC 10 - 58

QC 10 - 9

Handfinish - 1 - 1 - B4B

Handfinish - 1 - 2 - B4B

Handfinish - 1 - 3 - B4B

Handfinish - 1 - 4 - B4B

Handfinish - 1 - 5 - B4B

Handfinish - 1 - 6 - B4B

Handfinish - 1 - 7 - B4B

Handfinish - 1 - 8 - B4B

Handfinish - 1 - 9 - B4B

Handfinish - 1 - 10 -
B4BHandfinish - 1 - 11 -
B4BHandfinish - 1 - 12 -
B4BHandfinish - 1 - 13 -
B4BHandfinish - 1 - 14 -
B4BHandfinish - 1 - 15 -
B4BHandfinish - 1 - 16 -
B4BHandfinish - 1 - 17 -
B4BHandfinish - 1 - 18 -
B4BHandfinish - 1 - 19 -
B4BHandfinish - 1 - 20 -
B4BHandfinish - 1 - 21 -
B4BHandfinish - 1 - 22 -
B4BDAS
10
9-89

N/A

130 QC 7

1
pcs

10/11/19

0.00 0.00

QC 7 - 10

QC 7 - 13

QC 7 - 14

QC 7 - 15

QC 7 - 17

QC 7 - 18

QC 7 - 19

QC 7 - 2

QC 7 - 28

QC 7 - 3

QC 7 - 30

QC 7 - 34

QC 7 - 36

QC 7 - 37

QC 7 - 41

QC 7 - 47

QC 7 - 48

QC 7 - 51

QC 7 - 58

QC 7 - 59

QC 7 - 60

QC 7 - 9

QC 7 - 68

DAS
10
9-89

N/A

					QC 7 - 50	
					QC 7 - 67	
					QC 7 - 40	
					QC 7 - 24	
					QC 7 - 43	
					QC 7 - 61	
					QC 7 - 81	
					QC 7 - 76	
					QC 7 - 79	
140 Skidtubes - 2 - B4B	1 pcs	10/11/19	0.00 0.50	Skidtubes - 1 - B4B		
				Skidtubes - 2 - B4B		
				Skidtubes - 3 - B4B		MGA
				Skidtubes - 4 - B4B		
				Skidtubes - 5 - B4B		
				Skidtubes - 6 - B4B		
				Skidtubes - 7 - B4B		
150 QC 5	1 pcs	10/11/19	0.00 0.00	QC 5 - 10		
				QC 5 - 12		
				QC 5 - 17		
				QC 5 - 18		
				QC 5 - 19		
				QC 5 - 22		
				QC 5 - 24		
				QC 5 - 3		
				QC 5 - 43		
				QC 5 - 49		
				QC 5 - 51		
				QC 5 - 58		
				QC 5 - 68		
				QC 5 - 9		
				QC 5 - 50		
				QC 5 - 30		
				QC 5 - 40		
				QC 5 - 61		
				QC 5 - 81		
160 Skidtubes - Bend - 2 - B4B	1 pcs	10/11/19	0.50 0.33	Skidtubes - Bend - B4B		MGA
170 QC 5	1 pcs	10/11/19	0.00 0.00	QC 5 - 10		
				QC 5 - 12		
				QC 5 - 17		
				QC 5 - 18		
				QC 5 - 19		
				QC 5 - 22		
				QC 5 - 24		
				QC 5 - 3		
				QC 5 - 43		
				QC 5 - 49		
				QC 5 - 51		
				QC 5 - 58		
				QC 5 - 68		
				QC 5 - 9		
				QC 5 - 50		
				QC 5 - 30		
				QC 5 - 40		
				QC 5 - 61		
				QC 5 - 81		
180 Skidtubes - 4 - B4B	1 pcs	10/11/19	0.00 2.00	Skidtubes - 1 - B4B		
				Skidtubes - 2 - B4B		
				Skidtubes - 3 - B4B		MGA

195 QC 5	1 pcs	10/11/19	0.00 0.00	Skidtubes - 4 - B4B	
				Skidtubes - 5 - B4B	BF
				Skidtubes - 6 - B4B	
				Skidtubes - 7 - B4B	
				QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
200 Handfinish - 1-2- Chemical- B4B	1 pcs	10/11/19	0.00 0.25	Handfinish - 1 - 1 - B4B	
				Handfinish - 1 - 2 - B4B	
				Handfinish - 1 - 3 - B4B	
				Handfinish - 1 - 4 - B4B	
				Handfinish - 1 - 5 - B4B	
				Handfinish - 1 - 6 - B4B	
				Handfinish - 1 - 7 - B4B	
				Handfinish - 1 - 8 - B4B	
				Handfinish - 1 - 9 - B4B	
				Handfinish - 1 - 10 - B4B	
				Handfinish - 1 - 11 - B4B	
				Handfinish - 1 - 12 - B4B	
				Handfinish - 1 - 13 - B4B	
				Handfinish - 1 - 14 - B4B	
				Handfinish - 1 - 15 - B4B	
				Handfinish - 1 - 16 - B4B	
				Handfinish - 1 - 17 - B4B	
				Handfinish - 1 - 18 - B4B	
				Handfinish - 1 - 19 - B4B	
				Handfinish - 1 - 20 - B4B	
				Handfinish - 1 - 21 - B4B	
				Handfinish - 1 - 22 - B4B	
210 Spray Paint - 2 - B4B	1 pcs	10/11/19	0.00 0.50	Spray Paint - 1 - B4B	
				Spray Paint - 2 - B4B	
				Spray Paint - 3 - B4B	

10/1/2019

[Dart Hawkesbury] Job Sheet - Lajeunesse, Marie

220 QC 14	1 pcs	10/11/19	0.00 0.00	Spray Paint - 4 - B4B	
				QC 14 - 15	
				QC 14 - 2	
				QC 14 - 34	
				QC 14 - 41	
				QC 14 - 51	
				QC 14 - 58	
				QC 14 - 59	
				QC 14 - 9	
				QC 14 - 68	
				QC 14 - 40	
				QC 14 - 19	
				QC 14 - 43	
				QC 14 - 24	
				QC 14 - 61	
				QC 14 - 81	
230 Handfinish - 4-2-Assembly-B4B	1 pcs	10/11/19	0.00 0.50	Handfinish - 4 - 1 - B4B	
				Handfinish - 4 - 10 - B4B	
				Handfinish - 4 - 11 - B4B	
				Handfinish - 4 - 12 - B4B	
				Handfinish - 4 - 13 - B4B	
				Handfinish - 4 - 14 - B4B	
				Handfinish - 4 - 15 - B4B	
				Handfinish - 4 - 2 - B4B	
				Handfinish - 4 - 3 - B4B	
				Handfinish - 4 - 4 - B4B	
				Handfinish - 4 - 5 - B4B	
				Handfinish - 4 - 6 - B4B	
				Handfinish - 4 - 7 - B4B	
				Handfinish - 4 - 8 - B4B	
240 QC 5	1 pcs	10/11/19	0.00 0.00	Handfinish - 4 - 9 - B4B	
				QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
250 Packaging 3-1 - Stock - B4B	1 pcs	10/11/19	0.00 0.00	QC 5 - 81	
				Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	

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Packaging 3 - 5 - B4B	
Packaging 3 - 6 - B4B	
Packaging 3 - 7 - B4B	
Packaging 3 - 8 - B4B	
Packaging 3 - 9 - B4B	
Packaging 3 - 10 - B4B	
Packaging 3 - 11 - B4B	
Packaging 3 - 12 - B4B	
Packaging 3 - 13 - B4B	
Packaging 3 - 14 - B4B	
Packaging 3 - 15 - B4B	
Packaging 3 - 16 - B4B	
Packaging 3 - 17 - B4B	
Packaging 3 - 18 - B4B	
Packaging 3 - 19 - B4B	
Packaging 3 - 20 - B4B	
Packaging 3 - 21 - B4B	
Packaging 3 - 22 - B4B	
Packaging 3 - 23 - B4B	
Packaging 3 - 24 - B4B	
Packaging 3 - 25 - B4B	
Packaging 3 - 26 - B4B	
Packaging 3 - 27 - B4B	
Packaging 3 - 28 - B4B	
Packaging 3 - 29 - B4B	
Packaging 3 - 30 - B4B	
Packaging 3 - 31 - B4B	
Packaging 3 - 32 - B4B	
Packaging 3 - 33 - B4B	
Packaging 3 - 34 - B4B	
Packaging 3 - 35 - B4B	
Packaging 3 - 36 - B4B	

270 QC 21 - FG

Tooling only, Do Not place in stock

10/11/19

0.00 0.00

QC 21 - FG - 21

QC 21 - FG - 70

QC 21 - SA - 53

OCT 16 2019

DAS 70

Part Op 100 - ****VERIFY AND INSPECT THE MATERIAL PRIOR TO USE**** 1- Cut AFT end of tube at 141.50" as per dwg

Descriptions: D5634 and deburr end. 2-Notch FWD skid thru back wall only as per section E-E. Prepare for welding 3- Weld fwd cap as per dwg D5634 and QSI004 AR Aluminum Rod Batch: 4-Drill Aft cap pilot hole using DT8025. 5-

Cleco DT8025 in position and install pilot hole drill Jig DT10533. Drill 3/16" pilot holes as per Dwg D5634-041 6- Drill 3 most fwd holes using DT10568 A/B/C. 7-Remove inner indexing ridge on aft end of skid tube as per Dwg D5634 scribe batch # 8-Open aft end cap holes to Ø0.208" as per Dwg D5634. 9-sink holes as per dwg. Deburr aft end. 9-Open cross bolt spacer holes as per DWG section C-C and deburr as per QSI 018.

110 - QC5- Inspect part completeness to step on W/O

115 - QC10- Inspect visual per QSI004 ground welds

120 - (Chemical Conversion Coat per QSI005 4.1)

130 - QC7-Inspect Chemical Conversion Coat

140 - 1- Open holes section B-B, deburr and c'sink crossbolt spacers holes for welding only on section B-B as per dwg 2-Bond D5636-041 web in place as per QSI 015. Ensure holes line up Allow 12 Hrs. cure time before cutting Start

Date: Finish Date:

150 - QC5- Inspect part completeness to step on W/O

160 - 1-Bend AFT end of tube using bend prog. D5634 AFT as per dwg D5634. Install drop pins in crossbolt spacer holes to maintain web position.

170 - QC5- Inspect part completeness to step on W/O

180 - 1- Weld D3275-1 Spacers as per dwg Aluminum rod Batch: 138989 2- Grind weld flush as per dwg 3- Insert D4720-1 Spacer. Swage as per section B-B QSI 002. Trim and grind flush per QSI 002

195 - QC5- Inspect part completeness to step on W/O

200 - Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch

210 - PRIME PER DART QSI 005 4.2.1.3.3 (FLOAT SKIDTUBE PRIMER) BATCH: PAINT GLOSS

BLACK PER DART QSI 005 4.2.2.4 (FLOAT SKIDTUBE PAINT) BATCH:

220 - QC14- Inspect Spray Paint

230 - 1-Install Aft Cap and seal with Sikaflex. Clean excess adhesive. 2- Wing Walk tube as per dwg.

Batch:

240 - QC5- Inspect part completeness to step on W/O

250 - Identify as per dwg & Stock Location:

270 - QC21- Final Inspection - Work Order Release

*Tooling only, Do Not place in inventory***Job BOM**

Part / Item	Component Name	Quantity	Operation	Container
D5633-1	CAP	1 pcs (1 ea)	100-Skidtubes - 1	
D5634-041BENT	Float Skidtube Assembly, Bent	1 pcs (1 ea)	100-Skidtubes - 1	
D5636-041	Float Web Assembly	1 pcs (1 ea)	140-Skidtubes - 2 - B4B	
D3275-1	Cross Bolt Spacer	7 pcs (7 ea)	180-Skidtubes - 4 - B4B	
D4720-1	Spacer	23 pcs (23 ea)	180-Skidtubes - 4 - B4B	
D2646	Aft Cap	1 pcs (1 ea)	230-Handfinish - 4-2-Assembly-B4B	
MS24693-C272	Screw	2 Ea (2 ea)	230-Handfinish - 4-2-Assembly-B4B	

Job Allocations

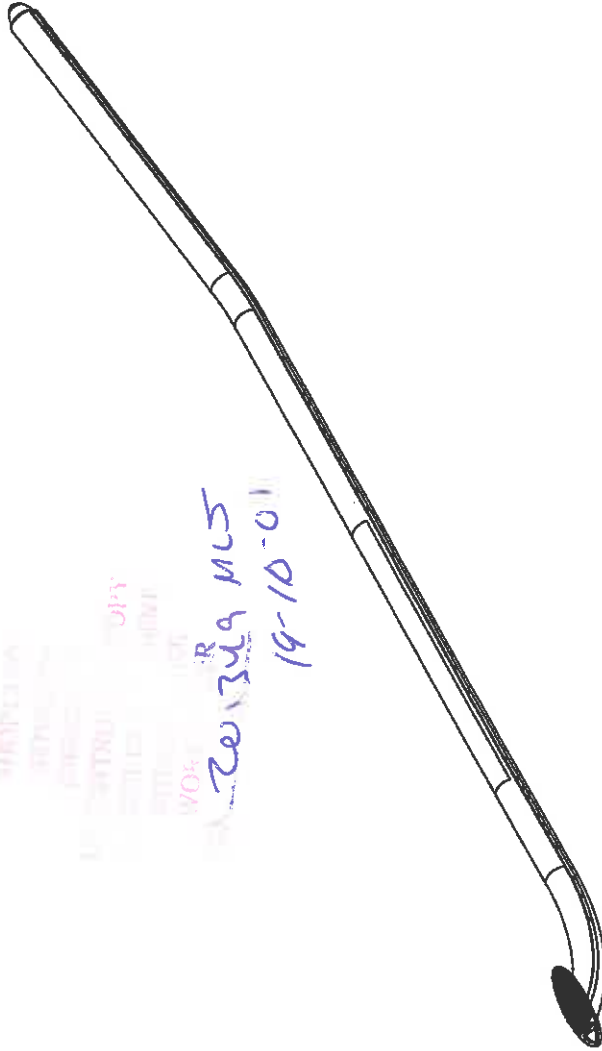
Operation	Component Part	Required	Inventory	Allocated
100-Skidtubes - 1	D5633-1	1	4	0
	D5634-041BENT	1	6	0
140-Skidtubes - 2 - B4B	D5636-041	1	1	0
180-Skidtubes - 4 - B4B	D3275-1	7	145	0
	D4720-1	23	103	0
230-Handfinish - 4-2-Assembly-B4B	D2646	1	47	0
	MS24693-C272	2	914	0

*19.10.01***Part Specifications**

Specifications could not be found.

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QTY	PART NUMBER	DESCRIPTION
X	D5634-041	FLOAT SKIDTUBE ASSEMBLY
1	D2646	AFT CAP
7	D3275-1	SPACER
23	D4720-1	SPACER
1	D5633-1	TOW STEP
1	D5634-1	FLOAT SKIDTUBE
1	D5638-041	FLOAT WEB ASSEMBLY
2	M524693-C272	SCREW, CSK 100°



D5634-041 FLOAT SKIDTUBE ASSEMBLY

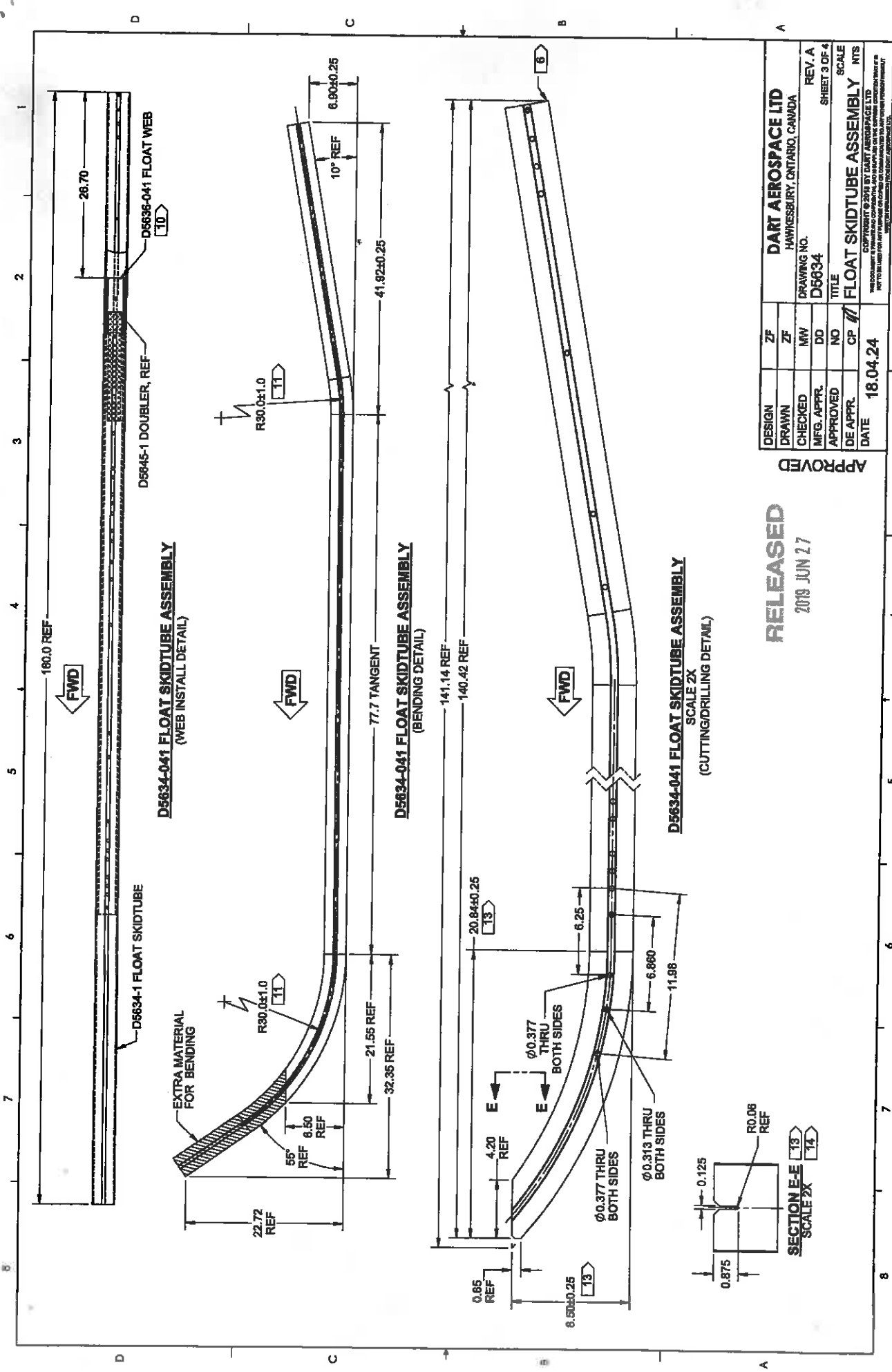
- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIME PER DART QSI 005 4.2.1.3 (FLOAT SKIDTUBE PRIMER) PAINT, GLOSS BLACK PER DART QSI 005 4.2.2.4 (FLOAT SKIDTUBE PAINT) BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
 - 3) TOOL RANGES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) LIMITS: INCREASE PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 5) BREAK SQUARE EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY PER DART QSI 044 8.4 ON INNER TUBE SURFACE AT AFT END.
 - 7) WEIGHT: 21.03 lb
 - 8) SEAL MATING SURFACES WITH SIKAFLEX -241/291 OR PROSEAL P/S 880/1422 OR MIL-S-8802 CLASS B2 SEALANT
 - 9) INSTALL FASTENERS WITH SIKAFLEX -241/291 OR PROSEAL P/S 880/1422 OR MIL-S-8802 CLASS B2 SEALANT
 - 10) LOCATE AS SHOWN, ENGINE BE WHEELER END IS LOCATED AT AFT BEND REGION
 - 11) THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5" ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020" DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
 - 12) WELDING PER QSI 004
 - 13) IT IS PERMISSIBLE TO GRIND SKIDTUBE TO IMPROVE FIT WITH TOW STEP. DIMENSIONS SHOWN AFTER GRINDING FOR TOW STEP.
 - 14) SLOT FOR D5633-1 TOW STEP THRU BACK WALL ONLY.

RELEASED

2019 JUN 27 9
ECL M-7HL

REV.	NEW ISSUE	DESCRIPTION	ZF	DATE
DESIGN		DART AEROSPACE LTD		18.04.24
DRAWN	ZF	HAWKESBURY, ONTARIO, CANADA		
CHECKED	ZF	DRAWING NO.		
MFG. APPR.	MM	D5634		
APPROVED	DD	TITLE		
DE APPR.	CP	FLOAT SKIDTUBE ASSEMBLY		
DATE	18.04.24	SCALE		
		NTS		

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RELEASED
2019 JUN 27

DESIGN	ZF	DART AEROSPACE LTD
DRAWN	ZF	HAWKESBURY, ONTARIO, CANADA
CHECKED	MW	DRAWING NO.
MFG. APPR.	DD	D5634
APPROVED	NO	TITLE
DE APPR.	CP	FLOAT SKIDTUBE ASSEMBLY
DATE	18.04.24	SCALE
		NTS

REV. A
SHEET 3 OF 4

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Date:

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No.

Route update only



Job: _____ Part No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐		DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Eng. (Non-AW) ☐ Engineering ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Water Jet ☐ Large Fab ☐ Finishing ☐ Rec/Store/Packaging ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QS1042)			
Description Work Order Deviation		Disposition					
				Completed By			
				Lead hand / Supervisor			
				QC / QA Coordinator			

Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY Contamination ☐ Power Loss/Surge ☐ Positioned Wrong ☐ Misaligned/off center ☐ Folio/Program ☐ Outside Tolerance ☐ BOM/Route ☐ Grain Direction ☐ Drawing ☐ Broken/Damage/Defect ☐ Weld ☐ Finish ☐ Incomplete/Undeclared Instructions ☐ Wrong Stock Pulled ☐ Part Lost/Missing ☐ Drill Holes ☐ Out of Sequence ☐ Misread ☐ Flt/Function ☐ Off-set/Set-up ☐									
		Other/Details:									

PEC Request Form

General Info:

Product Part Number (top level #)	D505-1057
Product Description	Float skidtube
Project Job #	N/A (New large fab tooling)
DT #	DT10584
Requested By	David Duval
Date of Request	19.10.01
Requested Due Date	19.10.16

Manufacturing Info:

[illegible]

Note:

Need to manufacture one D5634. This fixture will be for Large.(Eric L.) To validate form and fit of the wearplate ones they are welded.

**This tube will need only;
To be bent/drill/add the crossbolt spacer and install web.**

I do not need the step to be welded, no aft cap and no finish.

